



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/661,769 Confirmation No. : 7277
First Named Inventor : Reinhold FUESSINGER
Filed : September 15, 2003
TC/A.U. : 3671
Examiner : Alexandra K. Pechhold
Docket No. : 080404.52663US
Customer No. : 23911
Title : Collapsible Bridge and Method of Making and Using
Same

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R §§ 1.97 AND 1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This supplements the Information Disclosure Statement submitted in the above-identified application on September 15, 2003.

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached Form PTO-1449 and/or listed herein and which the Examiner may deem relevant to patentability of the claims of the above-identified application.

English abstract summarizing the disclosures of the European publications are submitted herewith.

The enclosed search report of the European Patent Office was issued in a corresponding European patent application.

The search report notes the Högl reference cited in the Office Action mailed September 2, 2004 as an "A" document, *i.e.*, a background document illustrative of the art.

The search report also cites European patent document EP 0 600 321 A1 ("EP '321"). EP '321 discloses a collapsible bridge. In the present invention, the transverse girders rest *on the lower nodes of the two truss planes of a track girder*, thereby optimally transferring transverse forces to the diagonal struts (the latter serving the function of transferring the transverse forces to the bridge bearings on the bank). In contrast, the EP '321 transverse girders are connected with track girders *at the end and in the middle of each bridge element A* (see, EP '321 at 4:30-32; Fig. 2) where there are no lower truss nodes (indeed, the most distant points from the lower nodes). As a consequence of this static arrangement, a connection between an upper truss node and the transverse girder 23 is indispensable. This connection is implemented by struts 21, 22 (also visible in Fig. 6; because the struts 21, 22 are arranged in the plane of the truss walls 11,12, the numerals 21, 22 appear only in brackets). The present invention bridge does not require such struts connecting an upper node with the transverse girder, leading to a considerable weight reduction, a particularly important feature for lightweight bridges. In addition, such struts inside the track girders extend construction or dismantling times of the bridge.

The present invention bridge is also distinguished from the EP '321 bridge by their chord profiles. The present invention's bridge has only one chord profile (divided in two parts) at each triangulation point of the track girder. According

to EP '321, there are two full chord profiles 13 at the upper triangulation point. Therefore, the weight of the EP '321 bridge is higher than the present invention allows.

Further, as a consequence of the presence of the two upper chord profiles the cross section of the whole EP '321 track girder is of the form of a trapezoid (*i.e.*, the planes of the two truss walls 11, 12 intersect outside the two upper chord profiles 13) rather than the form of a triangle (*i.e.*, the planes of the two truss walls intersect inside the upper chord profile). The present invention's structure is thus very stable – the triangular cross section of the track girder can be maintained even under heavy loads, whereas the trapezoidal cross section of the EP '321 is not as stable, allowing deformation of the cross section of the track girder. Such deformation results in a transverse force tending to drive the two upper chord profiles 13 away from each other. Indeed, if clasp 17 (used to connect the two chord profiles; Fig. 4) fails, this could lead to the collapse of the whole EP '321 bridge.

Another consequence of the presence of the two upper chord profiles in EP '321 is that the storage space needed for storing the dismantled bridge is considerably larger than the present invention bridge, because the width of the EP '321 track girder when folded together is larger (*i.e.*, the sum of the diameter of the two upper chord profiles plus the distance between the two chord profiles).

Finally, the present invention bridge, provided with a hinge at its top nodes, permits the two truss walls of a track girder according to be folded without tools (no partial disintegration of the truss girder, no loosening of any screw connections, etc.). With the EP '321 bridge, a clasp 17 covering the two chord profiles 13 is fixed by a screw (*see, e.g.*, EP '321 Fig.4). This screw has to be loosened (and the clasp 17 disengaged) before folding of the EP '321 elements can take place, prolonging the time for dismantling or construction of the EP '321 bridge.

The present Information Disclosure Statement is being filed after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action or Notice of Allowance (whichever is earlier). No fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

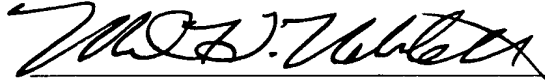
If necessary, the paper should be considered as a petition for consideration of the Information Disclosure Statement under 37 C.F.R. § 1.97(d)(2) and that the petition fee set forth in 37 C.F.R. § 1.17(i) in accordance with 37 C.F.R.

§ 1.97(d)(3) should be charged to Deposit Account 05-1323, Docket No.:

101235.52663US.

January 3, 2005

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Donald D. Evenson", written over a horizontal line.

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PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary) Sheet 1 of		Complete if Known	
		Application Number	10/661,769
		Filing Date	September 15, 2003
		First Named Inventor	Reinhold FUESSINGER, et al.
		Art Unit	3671
		Examiner Name	Alexandra Pechhold
		Attorney Docket Number	080404.52663US

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
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FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)					
		EP 0 600 321 A 1		11/19/93	Krupp Foerdertechnik GmbH		Abs.
		DE 195 10 582 A I		3/23/95	Krupp Foerdertechnik GmbH		Abs.
		CH 666 500 A5		12/2/82	Peter Hoegl-Potterat, Guemligen		Abs.
		European Search Report		11/16/04			

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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